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09/043,406	03/18/1998	PAUL D O'BRIEN	36-1148	6681

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NIXON & VANDERHYE, PC  
1100 N GLEBE ROAD  
8TH FLOOR  
ARLINGTON, VA 22201-4714

EXAMINER

ROBINSON BOYCE, AKIBA K

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/043,406

Applicant(s)

O'BRIEN, ET AL

Examiner

Akiba K Robinson-Boyce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 53-58 and 61-75 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 53-58 and 61-75 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on 3/29/04 has been entered.

### ***Status of Claims***

2. Due to communications filed 3/29/04, the following is a non-final office action. Claims 1-52 and 59-60 are cancelled. Claims 53 and 54 have been amended. Claims 61-75 have been added. Claims 53-58 and 60-75 are now pending in this application and have been examined on the merits. Claims 53-58 and 60-75 are rejected as follows.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which

said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 53-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parad (US 5,369,570), in further view of Wrabetz et al (US 5,442,791).

As per claims 53, Parad discloses:

Processing the service request, (Col. 9, lines 48-56, [sending requests for actions to appropriate systems]);

negotiation means for use in establishing conditions applicable to provision of one or more component processes involved in provision of the service, said negotiation means being adapted to assemble said conditions in the data store proactively by negotiation prior to receipt of said service request, (Col. 29, lines 49-61, [Here, the requirements are fed into the Resource Engines component where a schedule that meets requirements is attempted to be created. This attempt represents the negotiation process since the Resource Engine tries to meet specific requirements requested by the requester by matching different resources with each request, also part of the negotiation process is shown through interaction between the user and the intelligence of the action control via logic and where user established rules in database through use of a menu));

an up-datable data store/means to access said up-datable data store for storing said conditions when established, (Col. 29, lines 56-61, Col. 10, line 5 w/ Col. 26, lines 36-42, Fig. 14 [shows rules part of database])

where the processing means is adapted to process a service request by accessing one or more of the previously established conditions in the data store, processing the request using the one or more established conditions and

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producing said response, (Col. 26, lines 37-41, [where rules are retrieved from the database in order to determine appropriate calendars]).

Parad fails to disclose an input for receiving a service request, but does disclose a resource engine that utilizes inputs in message form for the processing of resources in col. 13, lines 11-14.

However, Wrabetz et al discloses:

An input for receiving a service request, (Col. 6, lines 47-51, [common remote execution interface]). Wrabetz et al discloses this limitation in an analogous art for the purpose of showing that the common remote execution interface is used to receive request for services.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have an input for receiving a service request for the purpose of providing means for requesting services.

As per claim 54, Parad discloses:

Wherein one or more of said established conditions has an associated expiry time after which it is no longer applicable, (col. 16, lines 48-51 and lines 53-58, [after interval, where each rule in succession defines the last point in time where the rule is applied])

As per claim 55, Parad discloses:

Wherein the processing means is adapted to detect an expired or undefined condition in the data store, which condition is applicable to a component process for the provision of a requested service, and to trigger the negotiation means to establish a substitute condition, (Col. 28, lines 38-51, w/ Col. 29, lines 41-61, [where if there is a rule violation, the user sends a message to the user's action control where the user can use the action control to establish

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another rule with the user of a menu, in this case, an expired or undefined condition is represented by a rule violation])

As per claim 56, Parad discloses:

means to access said data store for storing data related to services offered by the system and to one or more entities which have an interest in receiving information relating to one or more of said services, together with means to transmit information based on said data related to services to the one or more entities which have an interest, (Col. 29, lines 56-59, [menu that provides maintenance functions for reference tables], col. 6, lines 32-34 and Fig. 12, [component parts used to transmit]).

As per claim 57, Parad discloses:

which further comprises initiation means to initiate one or more component processes in provision of a requested service, (Col. 16, lines 31-38, [instance of the resource table]).

As per claim 58, Parad discloses:

provisioning a requested service requires provision of a selected set of component processes, (Col. 8, lines 33-42, [applying resource specific resource requirements and rules and the processing of these resources being effected by the rules, where resources are directly associated with the delivery of services as shown in col. 1, lines 6-10], and col. 9, lines 45-56, [where it is shown that process characteristics are used and operations {processes} are altered as a result of resource rules]);

the negotiation means establishes and stores a set of conditions applicable to provision of the component processes of the selected set, (Col. 29,

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lines 56-61, where negotiation takes place between the user and the intelligence of the action control via logic and the conditions are represented by rules); the processing means is adapted to process a service request by accessing the stored set of conditions in the data store, processing the request using said stored set, and producing said response, (Col. 26, lines 37-41, where the rule [condition] is retrieved from the database and processed by determining the calendar).

As per 61, Parad discloses:

Establishing conditions applicable to provision of one or more component processes in a service, proactively by negotiation prior to receipt of said service request, (Col. 9, lines 48-50, [defining rules], Col. 29, lines 49-61, [Here, the requirements are fed into the Resource Engines component where a schedule that meets requirements is attempted to be created. This attempt represents the negotiation process since the Resource Engine tries to meet specific requirements requested by the requester by matching different resources with each request, part of the negotiation process is also shown when interaction occurs between the user and the intelligence of the action control via logic]).

Accessing an up-datable data store and storing said conditions once established, (Col. 29, lines 56-61, Col. 10, line 5 w/ Col. 26, lines 36-42, Fig. 14 [shows rules part of database], where user established rules in database through use of a menu));

Processing said service request by:

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a) accessing one or more of said previously established conditions in the data store, (col. 16, lines 31-39, retrieved information about resource which includes rules)); and

b) providing a response to the service request, said response comprising an indication of availability of the requested service dependent upon whether said one or more established conditions is met, (col. 32, lines 60-67, claim 1, [initializing the resource engine with current conditions and determining actions to be taken based on changes to the conditions]) .

Parad fails to disclose subsequently receiving a request for said service, but does disclose a resource engine that utilizes inputs in message form for the processing of resources in col. 13, lines 11-14.

However, Wrabetz et al discloses:

subsequently receiving a request for said service, (Col. 6, lines 47-51,[common remote execution interface]). Wrabetz et al discloses this limitation in an analogous art for the purpose of showing that the common remote execution interface is used to receive request for services.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to receive a request for a service for the purpose of providing means for requesting services.

As per claim 62, Parad discloses :

wherein one or more of said established conditions stored in said data store is applicable until advent of an expiry time associated with said one or more



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conditions, (col. 16, lines 48-51 and lines 53-58, [after interval, where each rule in succession defines the last point in time where the rule is applied])

As per claim 63, Parad discloses :

wherein further comprising the step, responsive to receipt of said request, of finding whether any conditions for provision of said service are extant and substituting a substitute condition in the event that no such conditions are found, (Col. 16, lines 31-38, [information about resources {including rules} are updated according to the rule interval, and lines 48-59, [where it is shown that rules are applied during certain intervals and each rule defines the last point in time where the rule is applied, which represents the rule being extant]]).

As per claim 64, Parad discloses :

wherein said method further comprises the step of scheduling provision of said one or more component processes, said step being carried out after receipt of said request for said service, (Col. 32, lines 66-68, [using action control to determine actions to be taken based on changes]).

As per claim 65, Parad discloses:

wherein said method further comprises the step, responsive to a failure to schedule one or more component processes, of carrying out one of the following steps:

re-schedule the component process, (col. 8, lines 45-47, [adjusting scheduled events];

transmit a message to an entity which requested the service, (Col. 26, lines 60-62, [message sent when a condition value changes], indicating that

ii) the service can only be provided under conditions different to said previously established conditions, (col. 26, lines 60-62, [user must revise action list according to change]);

iii) re-assign the service to another service provider; or indicate to an entity which requested the service that the requested service cannot be provided, (col. 27, lines 58-62, [identify alternatives and implement indicated actions]).

As per claim 66, Parad discloses:

identifying component processes for use in provisioning the requested service, (col. 9, lines 35-47, Fig. 2, [illustrating major component parts]).

As per claim 67, Parad discloses:

Initiating one or more of said component processes identified for use in the requested service, (col. 32, lines 60-67, claim 1, [initializing the resource engine with current conditions]).

5. Claims 68-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parad (5,369,570) , and further in view of Babayev et al (5,615,121).

As per claim 68, Parad discloses:

executing a first autonomous software process representing a service requester, (col. 9, lines 48-56, [action control sending requests]);

the execution of said autonomous software processes establishing conditions applicable to provision of said service by negotiation between said first

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and second autonomous software processes, (col. 29, lines 49-61, [Here, the requirements are fed into the Resource Engines component where a schedule that meets requirements is attempted to be created. This attempt represents the negotiation process since the Resource Engine tries to meet specific requirements requested by the requester by matching different resources with each request., part of the negotiation process is also shown through interaction between the user and the menu component part where user established rules in database through use of a menu component part]);

accessing an up-datable data store and storing said conditions in said data store once established, (Col. 29, lines 56-59, [menu that provides maintenance functions for reference tables], col. 6, lines 32-34 and Fig. 12, [component parts used to transmit]);

the execution of said first autonomous software process subsequently involving the transmission of a request for said service for handling by said second autonomous software process, (Col. 28, line 64-Col. 29, line 4, [first and second component parts are shown to select most appropriate action]); and

responsive to receipt of said request, said second autonomous software process testing whether the established conditions for provision of said service are met and providing an indication as to whether the requested service is available in dependence upon the outcome of said test, (Col. 29, lines 54-66, [shows that when an action item's on a list changes significantly, the "MAKE SELECTION" component part determines a preferred action for the present action list item according to the changes, this determination represents the test]).

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Parad fails to disclose executing a second autonomous software process representing a service provider, but does disclose resources that effect the delivery of services in Col. 1, lines 6-10.

However, Babayev et al discloses:

executing a second autonomous software process representing a service provider, (Col. 2, line 47-Col. 3, line 3, [utilizing the scheduler to allocate resources represented by service providers]). Babayev et al discloses this limitation in an analogous art for the purpose of showing that service providers can be scheduled by using a scheduler.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to represent a service provider with the motivation of showing that resources used to deliver a service can comprise service providers.

As per claim 69, Parad discloses:

in which one or more of said established conditions is stored in said data store until advent of an expiry time associated with said one or more conditions, (col. 16, lines 48-51 and lines 53-58, [after interval, where each rule in succession defines the last point in time where the rule is applied])

As per claim 70, Parad discloses:

wherein, responsive to receipt of said request, said second autonomous software process tests whether any conditions for provision of said service are extant and substitutes a substitute condition in the event that no such conditions are found, (Col. 16, lines 31-38, [information about resources {including rules} are updated according to the rule interval, and lines 48-59, [where it is shown

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that rules are applied during certain intervals and each rule defines the last point in time where the rule is applied, which represents the rule being extant]).

As per claim 71, Parad discloses:

wherein, responsive to receipt of said request, said second autonomous software process tests whether any conditions for provision of said service are extant and substitutes a substitute condition in the event that no such conditions are found, , (Col. 16, lines 31-38, [information about resources {including rules} are updated according to the rule interval, and lines 48-59, [where it is shown that rules are applied during certain intervals and each rule defines the last point in time where the rule is applied, which represents the rule being extant]]).

As per claim 72, Parad discloses:

in which said second autonomous software process identifies one or more further autonomous software processes representing resources required to provide one or more component services in the provision of said service, (Col. 8, lines 33-42, [applying resource specific resource requirements and rules and the processing of these resources being effected by the rules, where resources are directly associated with the delivery of services as shown in col. 1, lines 6-10], and col. 9, lines 45-56, [where it is shown that process characteristics are used and operations {processes} are altered as a result of resource rules]);

Parad fails to disclose further comprising executing said further autonomous software process representing a component service provider, but does disclose resources that effect the delivery of services in Col. 1, lines 6-10.

However, Babayev et al discloses:

said method further comprising executing said further autonomous software process representing a component service provider, (Col. 2, line 47-Col. 3, line 3, [utilizing the scheduler to allocate resources represented by service providers]). Babayev et al discloses this limitation in an analogous art for the purpose of showing that service providers can be scheduled by using a scheduler.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to represent a service provider with the motivation of showing that resources used to deliver a service can comprise service providers.

As per clam 73, Parad discloses:

in which said second autonomous software process identifies one or more further autonomous software processes representing resources required to provide one or more component services in the provision of said service, (Col. 8, lines 33-42, [applying resource specific resource requirements and rules and the processing of these resources being effected by the rules, where resources are directly associated with the delivery of services as shown in col. 1, lines 6-10], and col. 9, lines 45-56, [where it is shown that process characteristics are used and operations {processes} are altered as a result of resource rules]);

Parad fails to disclose further comprising executing said further autonomous software process representing a component service provider, but does disclose resources that effect the delivery of services in Col. 1, lines 6-10.

However, Babayev et al discloses:

said method further comprising executing said further autonomous software process representing a component service provider, (Col. 2, line 47-Col.

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3, line 3, [utilizing the scheduler to allocate resources represented by service providers]). Babayev et al discloses this limitation in an analogous art for the purpose of showing that service providers can be scheduled by using a scheduler.

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to represent a service provider with the motivation of showing that resources used to deliver a service can comprise service providers.

As per claim 74, Parad discloses:

a computer having installed thereon autonomous software code, (Col. 7, lines 53-56, [combination of software/hardware]), executable to

provide an autonomous software process representing a service requester, (col. 9, lines 48-56, [action control sending requests]);

the execution of said autonomous software process

a) establishing conditions applicable to provision of said service by negotiation between said autonomous software process and one or more other autonomous software processes, (col. 29, lines 49-61, [Here, the requirements are fed into the Resource Engines component where a schedule that meets requirements is attempted to be created. This attempt represents the negotiation process since the Resource Engine tries to meet specific requirements requested by the requester by matching different resources with each request, part of the negotiation process is also shown when the user establishes rules in database through use of a menu component part]);

b) accessing an up-datable data store and storing said conditions in said data store once established, , (Col. 29, lines 56-59, [menu that provides maintenance functions for reference tables], col. 6, lines 32-34 and Fig. 12, [component parts used to transmit]);and

c) on subsequently receiving a request for said service, accessing said data store and testing whether the established conditions for provision of said service are met and providing an indication as to whether the requested service is available in dependence upon the outcome of said test, (Col. 29, lines 54-66, [shows that when an action item's on a list changes significantly, the "MAKE SELECTION" component part determines a preferred action for the present action list item according to the changes, this determination represents the test]).

As per claim 75, Parad discloses:

said autonomous software code is executable to provide a plurality of software threads, able to concurrently interact with different other autonomous software processes, (Col. 5, lines 40-49, [processing manages an active queue concurrent with other processing]).

### ***Response to Arguments***

6. Applicant's arguments with respect to claim 51, and 45-48 are moot in since they have been cancelled by amendment.

7. Applicant's arguments filed 3/29/04 have been fully considered but they are not persuasive.

As per claims 53-60, the applicant argues that the combination of Wrabetz and Parad fails to teach or suggest all of the claimed limitations such as



"negotiation means for use in establishing conditions applicable to provision of one or more components processes involved in provision of said service, said negotiation means being adapted to assemble said conditions in the data store proactively by negotiation prior to receipt of said service request". However, in Col. 29, lines 49-54 of Parad, the Action Control negotiates with the Resource Engine. Here, the requirements are fed into the Resource Engines component where a schedule that meets requirements is attempted to be created. This attempt represents the negotiation process since the Resource Engine tries to meet specific requirements requested by the requester by matching different resources with each request. In addition, part of the negotiation process is also shown in Col. 29, lines 56-61 of Parad. Here, the negotiation occurs between the user and the intelligence of the action control via logic and where user established rules in database through use of a menu. For this reason, Parad does disclose negotiation means.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akiba K Robinson-Boyce whose telephone number is 703-305-1340. The examiner can normally be reached on Monday-Friday, 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7238 [After final communications, labeled "Box AF"], 703-


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746-7239 [Official Communications], and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



A. R. B.  
July 7, 2004



TARIQ R. HAFIZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600